



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,167	04/28/2000	Frank Fruth	1.068US	3697

23494 7590 08/09/2005

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

POKRZYWA, JOSEPH R

ART UNIT	PAPER NUMBER
----------	--------------

2622

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/560,167

Applicant(s)

FRUTH ET AL.

Examiner

Joseph R. Pokrzywa

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/22/05, being a copy of the submission originally dated 11/9/04, has been entered.

Response to Amendment

2. Applicant's amendment was received on 8/3/04, and has been entered and made of record. Currently, **claims 1-15** are pending.

Response to Arguments

3. Applicant's arguments filed 8/3/04 with respect to the rejection of independent **claims 1 and 7** have been fully considered but they are not persuasive.

4. In response to applicant's arguments regarding the rejection of **claims 1 and 7**, which were cited in the Office action dated 5/3/04 as being anticipated by Barber et al. (U.S. Patent Number 6,535,906), wherein applicant argues that Barber fails to teach of "evaluating said scan line data to detect to a local Facsimile Terminal Equipment (FTE), if said scan line data has no packet loss" as recited in claims 1 and 7. The examiner notes that claim 1 currently requires

Art Unit: 2622

“evaluating said scan line data to detect the expected end of a scan line without packet loss”.

Barber teaches in column 4, lines 18-60 that regenerated scan lines are stored in buffer 32.

Further, in column 5, lines 3-41, buffer 32 can be overfilled or underfilled with scan line data, being symptoms that indicate packet loss, as read in column 1, lines 25-34. Thus, when the buffer 32 is overfilled or underfilled with scan line data, as seen in steps 406 and 410, a packet loss is detected. Continuing, Barber teaches of detecting an expected end of a scan line, being an end of scan line indicator, or the “end of scan line marker”, as read in column 4, lines 21 through 31, and seen in Fig. 4, step 402. Thus, as seen in Fig. 4, when the end of line marker is detected (“yes” in step 402), and the buffer 32 is not overfilled or underfilled (“no” in both steps 406 and 410), the data can be interpreted as the end of scan line data, being without packet loss.

Therefore, Barber can be interpreted as teaching of evaluating the scan line data to detect the expected end of a scan line without packet loss.

5. Therefore, the rejection of independent *claim 1*, as well as independent *claim 7*, cited in the Office action dated 5/3/04, under 35 U.S.C. 102(e), as being anticipated by Barber *et al.*, is maintained and repeated in this Office action.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. **Claims 1-12, and 15** are rejected under 35 U.S.C. 102(e) as being anticipated by Barber *et al.* (U.S. Patent Number 6,535,906, cited in the Office action dated 5/3/04).

Regarding **claim 1**, Barber discloses a method (seen in Figs. 3 and 4, being a method for the receiving gateway 24) for reducing facsimile page errors due to packet loss in facsimile transmission over a packet network (see abstract, and column 6, lines 32 through 48), comprising the steps of receiving facsimile image data packets from a packet network (see abstract, and column 3, lines 45 through 50), reassembling the received packets (see abstract, and column 3, lines 45 through 59, and column 4, lines 18 through 48), parsing the assembled packets into scan line data of the facsimile image (column 3, line 51 through column 4, line 48), evaluating the scan line data to detect the expected end of a scan line (being an “end of scan line indicator”, as read in column 4, lines 21 through 31) without packet loss (column 3, line 60 through column 5, line 65, wherein packet loss is detected when the buffer 32 is overfilled or underfilled with scan line data, based upon the data exceeding a preselected size range), playing out the scan line data to the local FTE if the scan line data has no packet loss (column 3, line 60 through column 4, line 31, column 4, line 49 through column 5, line 13, and column 5, lines 51 through 57, whereby the scan line data stored in the buffer is within the preselected range, and is transmitted to the receiving fax machine 14), and discarding the scan line data if the scan line data has packet loss (seen in Fig. 4, step 408, column 5, lines 13 through 50, whereby when fill bits are included in the received packet, the buffer 32 overflows, as the amount of stored data in the buffer 32

Art Unit: 2622

increases to a point that exceeds the maximum value when an “end of scan line indicator” is received).

Regarding *claim 2*, Barber discloses the method discussed above in claim 1, and further teaches of steps of replacing the discarded scan line data with zero fill data (column 5, lines 58 through 65), and playing out the zero fill data to the local FTE (column 5, line 58 through column 6, line 31).

Regarding *claim 3*, Barber discloses the method discussed above in claim 1, and further teaches of a step of replacing the discarded scan line data with scan line data defining a blank scan line (column 5, line 58 through column 6, line 31, wherein fill bits with a “0” value define a blank scan line).

Regarding *claim 4*, Barber discloses the method discussed above in claim 1, and further teaches of a step of replacing the discarded scan line data with a repetition of the previous scan line (column 5, line 58 through column 6, line 31).

Regarding *claim 5*, Barber discloses the method discussed above in claim 1, and further teaches of a step of buffering the scan line data (with scan line data being stored in buffer 32, column 3, line 45 through column 4, line 48).

Regarding *claim 6*, Barber discloses the method discussed above in claim 2, and further teaches of steps of continuing to provide zero fill data to the local FTE (step 412 in Fig. 4, column 5, line 58 through column 19), monitoring the scan line data for the start of the next detected scan line (column 4, line 18 through column 6, line 27), buffering the next detected scan line data (column 5, lines 58 through 65), evaluating the next detected scan line data to detect the expected end of a scan line without packet loss (column 3, line 60 through column 5, line 65),

Art Unit: 2622

playing out the next detected scan line data to the local FTE if the scan line data has no packet loss (column 3, line 60 through column 4, line 31, column 4, line 49 through column 5, line 13, and column 5, lines 51 through 57, whereby the scan line data stored in the buffer is within the preselected range, and is transmitted to the receiving fax machine 14), and continuing to provide zero fill data to the local FTE if the scan line data has packet loss (column 5, line 51 through column 6, line 27).

Regarding *claim* 7, Barber discloses a device (receiving gateway 24) for reducing facsimile page errors due to packet loss in facsimile transmission over a packet network (see abstract, and column 6, lines 32 through 48), comprising a gateway (see Fig. 2) for receiving facsimile image data packets from a packet network (see abstract, and column 3, lines 45 through 50), a processor (see Fig. 2) for reassembling the received packets (see abstract, and column 3, lines 45 through 59, and column 4, lines 18 through 48), parsing the assembled packets into scan line data of the facsimile image (column 3, line 51 through column 4, line 48), evaluating the scan line data to detect the expected end of a scan line (being an “end of scan line indicator”, as read in column 4, lines 21 through 31) without packet loss (column 3, line 60 through column 5, line 65, wherein packet loss is detected when the buffer 32 is overfilled or underfilled with scan line data, based upon the data exceeding a preselected size range), playing out the scan line data to a local FTE if the scan line data has no packet loss (column 3, line 60 through column 4, line 31, column 4, line 49 through column 5, line 13, and column 5, lines 51 through 57, whereby the scan line data stored in the buffer is within the preselected range, and is transmitted to the receiving fax machine 14), and for discarding the scan line data if the scan line data has packet loss (seen in Fig. 4, step 408, column 5, lines 13 through 50, whereby when fill bits are included

in the received packet, the buffer 32 overflows, as the amount of stored data in the buffer 32 increases to a point that exceeds the maximum value when an “end of scan line indicator” is received).

Regarding *claim 8*, Barber discloses the device discussed above in claim 7, and further teaches that the processor replaces the discarded scan line data with zero fill data (column 5, lines 58 through 65), and plays out the zero fill data to the local FTE (column 5, line 58 through column 6, line 31).

Regarding *claim 9*, Barber discloses the device discussed above in claim 7, and further teaches that the processor further replaces the discarded scan line data with scan line data defining a blank scan line (column 5, line 58 through column 6, line 31, wherein fill bits with a “0” value define a blank scan line).

Regarding *claim 10*, Barber discloses the device discussed above in claim 7, and further teaches that the processor further replaces the discarded scan line data with a repetition of the previous scan line (column 5, line 58 through column 6, line 31).

Regarding *claim 11*, Barber discloses the device discussed above in claim 7, and further teaches of a buffer for buffering the scan line data (with scan line data being stored in buffer 32, column 3, line 45 through column 4, line 48).

Regarding *claim 12*, Barber discloses the device discussed above in claim 8, and further teaches that the processor further continues to provide zero fill data to the local FTE (step 412 in Fig. 4, column 5, line 58 through column 19) while monitoring the scan line data for the start of the next detected scan line (column 4, line 18 through column 6, line 27), the buffer stores the next detected scan line data (column 5, lines 58 through 65), the processor evaluates the next

Art Unit: 2622

detected scan line data to detect the expected end of a scan line without packet loss (column 3, line 60 through column 5, line 65), plays out the next detected scan line data to the local FTE if the scan line data has no packet loss (column 3, line 60 through column 4, line 31, column 4, line 49 through column 5, line 13, and column 5, lines 51 through 57, whereby the scan line data stored in the buffer is within the preselected range, and is transmitted to the receiving fax machine 14) or continues to provide zero fill data to the local FTE if the scan line data has packet loss (column 5, line 51 through column 6, line 27).

Regarding *claim 15*, Barber discloses the method discussed above in claim 1, and further teaches of replacing the discarded scan line data with a repetition of data corresponding to the previous scan line (column 6, lines 11 through 20, wherein “an indefinite number of copies can be transmitted until the total amount in the buffer 32 is greater than the minimum value”, thus stating that a scan line may be re-sent an indefinite number of times, therein including having a repetition of the data corresponding to the previous scan line).

Allowable Subject Matter

8. **Claims 13 and 14** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding *claims 13 and 14*, in the examiner’s opinion, it would not have been obvious to have the invention, as claimed, include the features of shifting a first scan line without packet loss and including a detected end of the first scan line, that is received in the FTE after the

Art Unit: 2622

discarding, to join a second scan line without packet loss and including a detected end of the second scan line, that is received in the FTE before the discarding, to form a facsimile image.

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Berland (U.S. Patent Number 5,509,050) discloses a facsimile radio communication system that utilizes packets;

Anderton et al. (U.S. Patent Number 5,243,438) discloses a facsimile system for communicating data in packet form;

Quarni et al. (U.S. Patent Number 6,438,105) discloses an Internet facsimile system; and

Brent et al. (U.S. Patent Number 6,788,651) discloses a system for data communications on packet networks.

Conclusion

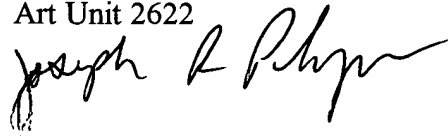
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (571) 272-7410. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa
Primary Examiner
Art Unit 2622

A handwritten signature in black ink, appearing to read "Joseph R. Pokrzywa", written over the printed name and title.

jrj